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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 45.172 XIANG			FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)				
International application No. PCT/EP 03/07394			International filing date (c 09.07.2003	lay/month/year)	Priority date (day/month/year) 10.07.2002		
Internationa F24F1/02		t Classification (IPC) or bo	th national classification ar	nd IPC			
Applicant		4		· · · · · · · · · · · · · · · · · · ·			
XIANG S	RL et	al.					
1. This Auth	interna nority a	ational preliminary exar nd is transmitted to the	nination report has beer applicant according to A	prepared by this Inte article 36.	ernational Preliminary Examining		
2. This	REPO	RT consists of a total of	of 5 sheets, including the	s cover sheet.			
×	This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).						
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3. This	s report	contains indications re	elating to the following ite	ems:			
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' 	I ⊠ Basis of the opinion II □ Priority						
111		•	opinion with regard to no	ovelty, inventive step	and industrial applicability		
III Non-establishment of opinion with regard to novelty, inventive step and industrial appliance of Unity of invention							
V	×	Reasoned statement			inventive step or industrial applicability;		
VI		Certain documents cit					
VII		Certain defects in the	international application				
VIII		Certain observations	on the international appl	cation			
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	_						
Date of su	bmissio	n of the demand		Date of completion of	this report		
09.02.2004				22.10.2004			
Name and	l mailing	address of the internation	nal	Authorized Officer			
Name and mailing address of the international preliminary examining authority:				AGRICITZES CHICE	and Decide Palace		
16.	EurD-8	opean Patent Office 0298 Munich		Valenza, D			
Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465			656 epmu d	Telephone No. +49 8	9 2399-7160		
					and		

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/07394

I.	Bas	sis	of	the	re	po	rt
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Description, Pages

1. With regard to the **elements** of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

	1-5		as originally filed				
	Cla	ims, Numbers					
	1-8		received on 05.10.2004 with letter of 04.10.2004				
	Dra	wings, Sheets					
	1/5-	5/5	as originally filed				
2.	With lang	With regard to the language , all the elements marked above were available or furnished to this Authority in the anguage in which the international application was filed, unless otherwise indicated under this item.					
	The	se elements were ava	ailable or furnished to this Authority in the following language: , which is:				
		the language of a tra	inslation furnished for the purposes of the international search (under Rule 23.1(b)).				
		the language of publ	ication of the international application (under Rule 48.3(b)).				
		the language of a tra Rule 55.2 and/or 55.3	inslation furnished for the purposes of international preliminary examination (under 3).				
3.	With inte	n regard to any nucle rnational preliminary e	otide and/or amino acid sequence disclosed in the international application, the examination was carried out on the basis of the sequence listing:				
		contained in the inter	rnational application in written form.				
		filed together with the	e international application in computer readable form.				
		furnished subsequer	ntly to this Authority in written form.				
		furnished subsequer	ntly to this Authority in computer readable form.				
		The statement that the international a	he subsequently furnished written sequence listing does not go beyond the disclosure pplication as filed has been furnished.				
		The statement that the listing has been furnit	he information recorded in computer readable form is identical to the written sequence ished.				
4.	The	amendments have re	esulted in the cancellation of:				
		the description,	pages:				
		the claims,	Nos.:				
		the drawings,	sheets:				

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No.

PCT/EP 03/07394

5. 🗆	This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
	(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to t report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims 2,3,5,6 No: Claims

1,4,7,8

Inventive step (IS) Yes: Claims

> No: Claims

1-8

Industrial applicability (IA) Yes: Claims 1-8

No: Claims

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The amendments filed with the letter dated 04.10.2004 fulfill the requirements of Article 34(2)(b).

Reference is made to the following documents:

- D1: FR-A-2 349 105 (RIELLO CONDIZIONATORI GIORDANO) 18 November 1977 (1977-11-18)
- D2: PATENT ABSTRACTS OF JAPAN vol. 011, no. 050 (M-562), 17 February 1987 (1987-02-17) -& JP 61 213529 A (MATSUSHITA SEIKO CO LTD), 22 September 1986 (1986-09-22)
- D3: US-A-3 279 209 (NIKOLAUS LAING) 18 October 1966 (1966-10-18)
- 1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
- 2. The document **D1** discloses (the references in parentheses applying to this document):
- 2.1. an embloc air conditioner comprising:
 - a condenser unit (38) crossed by a flow of air external to the room to be conditioned between at least an inlet (22) and at least an outlet (20);
 - an evaporator unit (36) crossed by a flow of air internal to the room to be conditioned between at least an intake (16) and at least a delivery way (18), wherein;
 - said condenser unit (38) and evaporator unit (36) are arranged in a single container (10), in said container (10) a first part (26) is defined wherein said evaporator unit (36) is arranged and a second part (28) in which said condenser unit (38) is arranged, said parts (26, 28) are aligned one behind the other (see figure 3) according to an axis parallel to the direction of the inlet (22) and outlet (20) of said external air flow, said inlet (22) and outlet (20) being placed in a substantially horizontal plane and said inlet (22) and outlet (20) consisting of two holes (cf. D2, page 5, line 34 - page 6, line 19 and figure 4).

- 2.2. The feature "only said first part (13a) of said container (13) in which said evaporator unit (5) is arranged, projecting inside said room (A) to be conditioned", disclosed in newly filed claim 1, is not a technical features of the air conditioner, but is the result of one of the possible installation or positioning configurations of the air conditioner with respect to the conditioned room.
- 2.3. The combination of the technical features of claim 1 is entirely disclosed in D1, and therefore claim 1 is not new in the sense of Article 33(2) PCT.
- 3. Dependent claims 2-8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:
- **3.2.** The additional feature of **claim 2** is merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to simplify de design of the container of the air conditioner.
- 3.3. The features of claim 3 have already been employed for the same purpose in a similar air conditioner, see document D2, figure 3. It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to an air conditioner according to document D1, thereby arriving at an air conditioner according to claim 3.
- 3.4. The additional features of claim 4 are disclosed in document D1, figure 1 and 2.
- **3.5.** The additional features of **claims 5 and 6** are merely one of several straightforward possibilities from which the skilled person would select, in accordance with circumstances, without the exercise of inventive skill, in order to optimize the air distribution in the room (see for example document **D3**).
- 3.6. The additional features of claim 7 and 8 are disclosed in document D1, figure 3.
- 4. The subject-matter according to any of claims 1 to 8 appear to be industrially applicable (Art. 33(4) PCT).



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CLAIMS

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1) An enbloc air conditioner (1) comprising:

- a condenser unit (2) crossed by a flow of air external to the room to be conditioned A between at least an inlet (3) and at least an outlet (4);
- an evaporator unit (5) crossed by a flow of air internal to the room to be conditioned A between at least an intake (6a, 6b) and at least a delivery way (7),

characterized in that said condenser unit (2) and said evaporator unit (5) are arranged in a single container 13, in said container (*3) a first part (13a) is defined wherein said evaporator unit (2) is arranged and a second part (13b) in which said condenser unit (5) is arranged, only said tirst part (13a) of said container (13) in which said evaporator unit (5) is arranged, projecting inside said room (A) to be conditioned, said parts (13a, 13b) are aligned one behind the other according to an axis (x) parallel to the direction of the inlet (Xi) and the outlet i(Xu) of said external air flow, through said at least one inlet (3) and one outlet (4) of said condenser unit (2), said inlet (Xi) and said outlet (Xu) being placed in a substantially horizontal plane and said inlet (3) and outlet (4) consisting of two holes.

2) The enbloc air conditioner (1) according to claim 1) characterized in that said holes are substantially circular having a big diameter, preferably not lower than 160 mm.

The enbloc air conditioner (1) according to claim 30 characterized in that said second part (13b) of said container (13) in which said condenser unit (2) is arranged, is built-in in a wall (W) of said room (A) to be conditioned.

The enbloc air conditioner (1) according to claim 3 characterized in that said container (13) is arranged on the windowsill (D) of a window (F) and has said second part (13b) projecting outside relative to the descent plane of the rolling shutter (P) closing said window (F).

The enbloc air conditioner (1) according to claim 1) characterized in that said at least one intake of said evaporator unit (5) comprise a first vertical intake (6a) and a second inclined intake (6b) pointing upwards.

The enbloc air conditioner (1) according to claim 1) characterized in that said evaporator unit (5) is provided with an inclined air

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-7.

delivery opening (7) pointing downwards.

Here The embloc air conditioner (1) according to claim 1) characterized in that said condenser unit (2) comprises at least a refrigerant compressor (8), at least a condenser bank (10) and at least a fan (9) arranged upstream said condenser bank (10).

Egy The enbloc air conditioner (1) according to claim 1) characterized in that said evaporator unit (5) comprises at least an evaporator bank (12) and at least a fan (11) arranged upstream said evaporator bank.

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